

# GRAMPAW PETTIBONE

## Clawed His Way Out

This month's mail bag contains an interesting first person account of what it feels like to be trapped in a burning plane as it plummets earthward. The pilot was flying an F2H-2 at 16,000 feet when his starboard engine exploded. Following the explosion the pilot lost complete control of the *Banshee*, and then found that neither the pre-ejection lever nor the manual would release the canopy, but lived to tell this story:

"After pulling the pre-ejection lever, which required little effort, but failed to jettison the canopy, I reached for the manual lever. About this time the plane must have changed its course while heading earthward, causing the 'G' force to become so terrific I was forced to place my right hand underneath my left elbow and push with every ounce of strength in order to reach the manual

"Pulling the lever, which also failed, I began to work my fingers along the edge until I reached the top where I managed to get my fingers beneath the canopy. Thinking I might be able to get more leverage by placing my feet on the instrument panel, I started to raise them when the 'G' force did it for me. In this position I was able to throw off the canopy.

"Without any trouble I reached the handle to the curtain and made a normal pull. Nothing happened! Again I made the same pull, and again nothing happened. By this time smoke had almost blanketed the cockpit and I could actual-

ly hear the fire burning.

"Realizing I must have fallen almost 8,000 feet and had little time left, I reached back once again for the handle of the curtain, this time pulling it all the way down to my knees. That did it! I was ejected vertically with the plane doing an air speed of 300 to 350 knots.

"Seat and curtain left me shortly thereafter and I began tumbling upon reaching for the 'D' ring. Somewhere I had read or been told that in order to stop tumbling, my legs and body would have to be straightened out. It worked!

"The ship had me radared in and the helicopter was off the deck before I ever hit the water. Although going in the ocean 25 to 30 miles away from the carrier, I was picked up in approxi-



mately 25 minutes.

"At the time of explosion no erratic indications were shown on the instrument panel whatsoever. The ejection seat worked perfectly. I would never have gotten out without it."

Grampan Pettibone Says:

I call this "getting out the hard way" and think that the pilot did a wonderful job of keeping his wits about him under circumstances when panic could have cost him his life.

He was a graduate of the ejection seat trainer course at NAMC PHILADELPHIA and reports that the trainer used there is fired with a relatively short curtain. While he may be stretching things a bit when he says that on that last pull the F2H-2 curtain came down to his knees, it's certainly worth knowing that a long and firm pull is required to fire the ejection seat, as the catapult is fired in the last three inches of curtain travel.

As to why the canopy failed to jettison with the pre-ejection lever and failed to open with the normal lever, I can only hazard a guess. It is very probable the explosion and fire damaged the air lines of the emergency system and cut the electrical lines to the normal system. In any case the pre-ejection lever removed the aft stop on the canopy so that once loosened it carried all the way off arming the ejection seat. I am told the air load on the canopy at these speeds is something mighty high and over 100 pounds would be required to move it against this force.

# **Dear Grampaw Pettibone:**

I was particularly interested in your article "Successful Ditching," published in the April edition. The pilot in this case was criticized for failure to use the proper technique in firing his litavest flare after a night water landing.

Now this lapse is truly difficult to comprehend; for the directions are so clear and simple. One end is labelled "Night Flare". Of course, this can't be read at night, but small protuberances aid in identification. Pointing that end away from the face and removing paper cap, the directions then read, "Fracture seal by levering with thumb under near side of ring and forefinger on top far side of ring." (This, of course, when ring is pried to position shown on illustrations.) "When seal snaps, remove the seal with a QUICK pull from the container, thereby igniting the signal. Hold signal up at arm's length 45° from body."

An average pilot, after careful demonstration of this correct procedure, could probably stand in the daylight with both feet firmly in the ground and ignite this flare 95% of the time. A year later, a little hazy on details, his efficiency would probably decrease to 85%. Now, hand him the flare on a black night, push him in the water, and tell him to get flare in operation quickly. He might succeed 65% of the time.

However, the important element of confusion and shock is still missing. Think of the situation—as designers of aviation equipment should—in the mind of the pilot.

It's a black night with no horizon—just that faithful engine and those blessed instruments. Suddenly, the engine misses. You full rich the mixture—it backfires blinding white flame—add RMP, throttle—check altimeters, losing manifold pressure, swear, sweat—losing altitude, check gyro horizon, airspeed, altitude open canopy—one look out in the black—back to the gases. You hit the water hard and slew crazily to the side.

The plane stops and you feel it settling in the blackness. You release the safety belt, start to pull yourself up. The chute and seat pack is heavy and fit snugly. Maybe it's caught. Can't waste time—must get out of harness. You unhook chest snap—water rising rapidly in cockpit. You clutch at the left leg buckle—feeling and fumbling. Got it! The plane lurches forward; water pours into the cockpit. Now the

right leg strap. You free yourself of the harness just in time-half hoist yourself in the cockpit. Radio cords still tie vou down. You desperately jerk them free. In the water you see the dark form of the plane nosing downbubbling, gushing. You're alone—no raft—pull life vest toggles—plane buzzing overhead. If they don't spot you now-it may be never. Must hurry with that flare!

There is the situation. Sudden shock and fear have reduced the pilot's normal mental capacity by at least one half. His eyes are blinded by darkness and sringing salt spray. He is submerged to his neck. Unseen waves break over him. If he doesn't light a flare quickly, the plane overhead will miss him. He is wearing gloves.

What do? Why, remove one sticky wet glove to identify the little nipples on one end of the flare. Remove the cardboard top and raise the ring. Be careful now-this must be just right. Then, "Lever with thumb under near

side of-etc.-etc.-etc.'

Actually the pilot's 38 caliber revolver loaded with tracer ammunitionwithout nipples or gingerly instructions-is his best night signalling device. The advantages of a "38" are: repeated operation, simple use (just pull the trigger), and a higher trajectory that can be seen many miles farther than a life raft flare.

LT, USN

Grampaw Pettibone Says:

You've sold me a bill of goods. I'm printing your letter in full in the hopes that it will inspire the designers of this type of equipment to break out their drawing boards and come up with a flare that is easier to use.

#### F4U-5N Rudder Tabs

In the February issue I described a couple of instances of runway rudder trim tabs in the F4U-5N type. The following speedletter has been received from a squadron flying these planes:

There have been at least three failures of the type described in your February pages in this Command during the past three years and fortunately no damage resulted from

any of them.

'It has been found that when full rudder tab is established, the P-1 autopilot (which is standard equipment in this type aircraft) may be used to relieve the pilot of all rudder pressure. Depending on the strength of the particular autopilot the ball will remain from one-half width from center to centered, according to tests made in this squadron. By using this method one pilot flew an F4U-5N from Patuxent River, Md. to NAS ATLANTIC CITY after his trim tab stuck at "full left". Of course, the autopilot is cut out prior to

the landing approach and a 'normal' landing is executed.

#### Hard Bounce

This one happened nearly a year ago, when the patrol plane commander of a PBM decided to give a simulated engine failure on takeoff.

The PPC, incidentally, was not occupying one of the pilots' seats but was standing between two ensigns who were at the controls.

At an altitude of about 150 feet following a touch-and-go landing, the PPC reached up and retarded the starboard throttle. Airspeed at this time was approximately 100 knots and the ensign in the left seat immediately retarded the port throttle and attempted a normal power off landing. He had to make a rapid flare out and the PBM hit with sufficient force to suffer strike damage. It bounced and remained airborne as full power was applied.

On impact the PPC was knocked off his feet and his right leg was broken. The force jerked off the pilot's phones, lowered his seat to the full down position, and snapped the co-pilot's head onto his chest.

When the two ensigns at the controls had things squared away, a quick check was made of damage to the plane. The seadrome tower control officer was asked to have a boat standing by with a doctor. All water tight doors were closed and the plane was landed.

The statement of the second radioman is of interest:

We bounced and Lt. - was thrown back. He hit with his head aft and lay there a few seconds. His first words were for me to go aft and check the crew in the after station. The crew gave me a thumbs up. Lt. was then standing up leaning against the ARR 31. He tested his weight against his right foot. I made him sit down and examined his leg. I saw that the ankle wobbled and told him that I thought his leg was broken above the ankle. I made him lie on the flight deck, head forward, and took my belt and the plane captain's and strapped his legs together . . . Had I morphine, I would have given him an injection. I gave him a glass of water and inflated my Mae West and put it under his head . . . He was in much pain . . . but asked me to send the "IN" report. I started to knock Mr. with my fist but didn't think that I had the power, so didn't. All of shis was while we were bouncing on our first landing."

Grampaw Pettibone Says: It's lucky for the PPC It's lucky for the PPC that this chap didn't have an old horse pistol handy. After all the Lieutenant's leg was brokenso . . . what the heck.

Seriously, though, morphine syrettes are available for multi-place aircraft. Local arrangements can be made with the Medical Department for their issuance and for

training in proper administration. The Fleet Air Wing in which this accident occurred is taking action to make them available in the custody of the Patrol Plane Commanders.

The concern of the injured PPC for the safety of the crew after the accident occurred is very commendable. However, this concern was a little bit late. Next time, I'll bet that he is occupying one of the pilot's seats when he gives a simulated emergency to a relatively inexperienced co-pilot.

## Dear Grampaw Pettibone:

Ridiculous as it may seem, this did happen.

A pilot qualified in the R4D departed on a five hour cross country flight. Weather was perfect—arrival O.K. The pilot knew that the R4D was good for about 8 hours, so decided to go on for another two hours without taking on fuel in order to expedite . . . did ask the plane captain if he could "stick" the tanks, but he replied that he had no stick. So off he went into the wild blue yonder-gages indicating erratically to say the least—unexpectedly strong winds—a disbelief of the gasoline gages-only 40 miles more to final destination-plenty of places to stop for fuel-stubbornness-finally a sweating arrival.

We took on fuel and signed for 767 gallons, which means that the aircraft was landed with a scant 37 gallons in the right auxiliary as the other tanks were used until pressure dropped. How close can you get . . . and how stupid?

A check afterward revealed that the tanks had not been topped off prior to original takeoff, and thus the plane had 100 gallons less than full . . . two pilots and a plane captain were snapped out of their lethargy!

CDR, USN PILOT

Grampaw Pettibone Says:

They say confession is good for the soul, and I have a notion that the wee small voice of conscience must have prompted this letter.

Actually there aren't very many old pilots around who haven't stretched a flight a little too far at one time or another. But it usually just takes about one real "hairy" experience to make a Christian out of a fellow and from then on he gets in the habit of always allowing as safe margin of fuel.

I'm looking for the day when the young pilots will start profiting from the mistakes that some of the old timers survived. Remember this-"Experience is the cheapest thing you can buy, if you're smart enough to get it second hand."

 VR-1—Butane cigaret lights filled under pressure will leak air and can be a fire hazard. Pilots are being warned against carrying them on flights. Gas fumes are dangerous.